

SW3S Subwoofer

Owner's Manual

Thank you for your purchase of the NHT Model SW3S Subwoofer. Please take a few minutes to read through this Owner's Manual prior to installing your new subwoofer. The information provided can help you to obtain maximum performance from your audio system. If you have questions or need assistance at any time during the installation or operation of your new subwoofer, please call your NHT Dealer or our Toll-Free Customer Hotline at:

1-800-NHT-9993

Please retain the Model SW3S packaging to protect the subwoofer in the event that you move or transport it.

Model SW3S Specifications

System Type: Acoustic Suspension design

Driver Complement: 12" polypropylene woofer

Response: 23Hz to 250Hz

Sensitivity: 87dB (2.83V at 1M)

Recommended Power: 50 watts min., 250 watts max.

Impedance: 6 ohms nominal, 4 ohms minimum

Inputs: 1 pair of 5-way binding posts

Weight: 72 lbs. each

Dimensions: 19"H x 19"W x 19"D

Finish: High gloss black laminate

Specifications are subject to change without notice, in accordance with our policy of continuously upgrading the performance of our products.

■ Design

NHT speakers are designed to deliver refined, musical sound from attractive and affordable packages. Our efforts are guided by the study of human hearing and are optimized for real-world use. Every NHT loudspeaker undergoes rigorous testing and quality control at the factory to ensure you years of listening pleasure.

The SW3S Subwoofer features a custom-designed 12" polypropylene woofer that is capable of accurate low frequency reproduction to 23Hz, with high output and low distortion. The SW3S, when combined with the NHT SA-3 monaural subwoofer amplifier, comprises the NHT SW3P Powered Subwoofer System. For a flatter overall low frequency response and increased clarity, two SW3S subwoofers may be connected in parallel to the NHT SA-3 subwoofer amplifier, which is designed with enough high current capability to drive two subwoofers. Alternately, you can use an external crossover and a monaural amplifier of your choice to create your own powered subwoofer system.

■ Placement

Contrary to popular belief, subwoofers are sensitive to placement. Experimentation is the key to finding the best arrangement in your listening environment. Generally, a subwoofer should be located in the same horizontal plane and along the same wall as the main speakers. Low frequencies produce long wavelengths and thus interact with room boundaries significantly. Placing the subwoofer nearer to a room boundary (walls, corners) will tend to increase its bass output, but may result in "boomy" or "muddy" sound. Conversely, placing the subwoofer farther away from room boundaries will tend to decrease its bass output, but may result in improved articulation and clarity.

Position the subwoofer so that it does not radiate sound directly into a wall or floor, and ensure that it faces into the room, unobstructed by large furnishings. If you are using two subwoofers, the greatest improvement in low frequency response is achieved by placing the second subwoofer on the opposite side of the room from the first. Avoid placing the two subwoofers symmetrically in the room (such as in two corners). As the SW3S is not magnetically shielded, do not place it in the immediate vicinity of a television, or picture discoloration may occur.

■ Connections

The SW3S Subwoofer is designed for use with an external crossover and a monaural amplifier. The SW3S does not have an internal crossover, so it should not be connected to any other amplifier or integrated amplifier unless it has a low-pass filter. Using the SW3S without a low-pass filter will not damage it, however the resulting sound will be undesirable.

Before connecting the SW3S to the SA-3 (or any amplifier), it is very important that you turn off the power to the amplifier. Proper wiring of the subwoofer is essential to good sound. NHT recommends a minimum of 14 AWG wire to connect the SW3S Subwoofer to the SA-3 Amplifier. If you choose to place the subwoofer at a distance greater than 15 feet away from the amplifi-

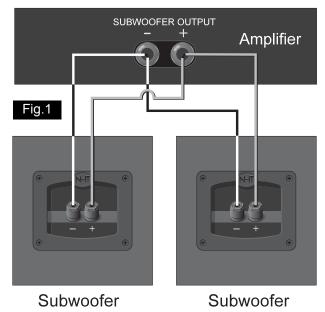
er, we suggest you use 12 AWG or larger wire. For specialty wire considerations, consult your local Authorized NHT Dealer. Prepare your speaker wire by stripping 1/4" to 3/8" of insulation from the ends and twisting the exposed wire strands tightly. The five-way binding posts on the back of the SW3S will accept raw wire, banana plugs or spade plugs. Tighten the binding posts by hand, as pliers can strip or break them.

Be sure to wire the subwoofer "in phase". That is, the positive (red) terminal on the amplifier output must be connected to the corresponding positive (red) terminal on the subwoofer. Likewise with the negative (black) terminals.

All speaker wires have some sort of marking along one or both conductors to help you make the correct connections.

To minimize noise pickup, segregate cables by function. Do not run low level signal cables parallel to power cables, speaker cables, or digital cables. Also, do not run speaker cables or digital cables parallel to power cords or parallel to each other. If different types of cables are placed near each other at some place in your system, separate them by the maximum practical distance and cross them at right angles where they meet.

When using two SW3S subwoofers with a single SA-3 subwoofer amplifier, the two subwoofers are wired in parallel. Using two equal lengths of speaker wire, connect the positive (red) conductors of both wires to the positive (red) terminal on the amplifier, and both negative (black) conductors to the negative (black) terminal on the amplifier. Then, connect one speaker wire to the first subwoofer (positive conductor to positive terminal, negative conductor to the negative terminal), and other speaker wire to the second subwoofer, wired in the same fashion (Fig.1).



Operation

The SW3S subwoofer was designed to handle a wide range of listening levels, but every speaker has limits. It is important to use common sense and listen for signs of possible distress from the speaker. Noticeable distortion or harsh breakup is an indication that either your amplifier or your speakers are running beyond their capacity, and the volume should be decreased. If you can feel any heat emanating from the front of the woofer, reduce the level immediately. Speaker damage most often occurs from sustained high volume levels, not from transient sounds or brief musical peaks. Excessive boosting of bass or equalizer controls can worsen the problem, and is not recommended.

■ Maintenance

Your subwoofer requires minimal maintenance under normal use. The cabinet may be cleaned using a damp cloth or a mild, non-abrasive glass cleaner. To clean the grille, first remove it from the subwoofer, then brush lightly with a soft brush or use a vacuum on its lowest setting. Do not expose the subwoofer to direct sunlight, high temperatures, or moisture. Do not attempt to clean the actual driver.

Limited Warranty Valid Only in the U.S.A.

Warranty Period

For the period of 5 years for parts and 5 years for labor from date of original purchase (the warranty period) from an authorized NHT dealer, Now Hear This (NHT) warrants that if our product fails to function properly under normal use due to a manufacturing defect when installed and operated according to the owner's manual instructions enclosed with the unit, it will be repaired or replaced with a unit of comparable value at the option of NHT without charge to you for parts or actual repair work. Parts supplied under this warranty may be new or rebuilt at the option of NHT.

What's Not Covered

This warranty does not cover any product which is used in any trade or business, or in an industrial or commercial application.

This warranty does not cover the cabinet or any appearance item, or any damage caused to the product resulting from: alterations, modifications not authorized in writing by NHT, accident, misuse or abuse, damage due to lightning or power surges, or being subjected to power in excess of the speaker's published power rating.

This warranty does not cover the cost of parts which would otherwise be provided without charge under this warranty, obtained from any source other than an authorized NHT service location. This warranty does not cover defects or damage caused by the use of unauthorized parts or labor or from improper maintenance.

Altered, defaced or removed serial numbers void this warranty.

Your Rights

The liability of NHT will be limited to the purchase price of the product, and NHT will not be liable for incidental or consequential damages. NHT limits its obligations under any implied warranties under state laws to a period not exceeding the warranty period. Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages. The above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

To Obtain Service

NHT has appointed a number of authorized service companies throughout the USA should your product ever require service. To receive warranty service, you will need to present your sales receipt showing place and date of original owner's transaction.

To find the name and address of the nearest authorized NHT service location, call or write: Customer Service Department, Now Hear This, 6400 Goodyear Road, Benicia, CA 94510. 1-800-NHT-9993

Please do not return your subwoofer to this address. It is not a service location.